

The Texas Talking Book Program and Assistive Technology for People with Vision Impairments

Texas Library Association Conference

Virtual Conference

April 21,2020

Assistive Technology

WHAT it is

How to LEARN about it

WHERE you can obtain it

How you can PAY for it

What is Assistive Technology

Assistive technology is an umbrella term that includes assistive, adaptive, and rehabilitative devices for people with disabilities and also includes the process used in selecting, locating, and using them. Assistive technology promotes greater independence by enabling people to perform tasks that they were formerly unable to accomplish, or had great difficulty accomplishing, by providing enhancements to, or changing methods of interacting with, the technology needed to accomplish such tasks.

Source: http://en.wikipedia.org/wiki/Assistive_technology

What does ALA say about AT and Libraries?

- From ASGCLA:
<https://www.asgcladirect.org/resources/assistive-technology/>
- In basic terms, libraries must provide access for all types of disabilities. This includes navigation within the library as well as access to computers, and library programs and services

Low Tech versus High Tech

- Low tech: devices or equipment that don't require much training, may be less expensive and do not have complex or mechanical features.
- High Tech: refers to the most complex devices or equipment, that have digital or electronic components, may be computerized, will likely require training and effort to learn how to use, and cost the most.
- Source: www.gatfl.org/assistive.php

Exciting Developments in AT

- Built-in technology
- Free or low-cost software
- Apps
- Tablets
- Funding / device loans / used equipment
- Constantly evolving

Downsides to Technology

- Can be expensive
- Problems with training:
 - Only available in certain areas / big cities
 - Transportation
 - Health
 - Money
 - Resistance to learning something new
 - Not enough trainers
- High rate of obsolescence of apps and devices

Blindness / Low Vision

- Low vision aids
- Video magnifiers
- Computer software
- Reading machines
- Digital audio book players and voice recorders
- Braille devices

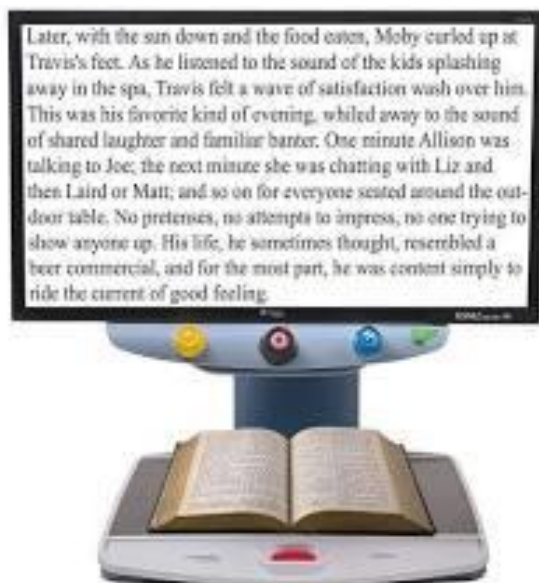
Low Vision Aids: Low Tech

- Talking / big number / Braille clocks and watches
- Talking / big number/ Braille telephones
- Braille / tactile labels
- Talking thermometers
- Talking blood pressure machines
- Talking glucometers



Simple Magnifiers





Video Magnifiers

- Also called CCTV's: closed-captioned televisions
- Magnifies print (stronger than a simple magnifier)
- Desktop and portable models

Reading Machines

- Scans print and reads it aloud
- Some have magnification capability as well
- Usually expensive
- Most are desktop models – one exception – KNFB reader – app for smartphones



Audio Book Players & Voice Recorders

- Talking Book Program has its own player
- Several of the commercial players are compatible
- Phone and tablet apps also available
- Recorders assist with organization



Braille Devices

- Displays and Notetakers



Computer Software

- Magnification
 - ZoomText
- Speech
 - JAWS
- Combination
 - Fusion

Technology Sources

- National manufacturers
- National catalog companies
- State / local manufacturers and distributors

National Manufacturers

- Dolphin: www.yourdolphin.com – magnification and speech software and apps
- Freedom Scientific: www.freedomscientific.com – magnification and speech software
- HIMS: www.hims-inc.com – video magnifiers and Braille devices
- Humanware: www.humanware.com – Braille devices, video magnifiers, and digital book players
- Kurzweil: www.kurzweiledu.com – reading machines
- Optelec: <https://us.optelec.com/> - video magnifiers
- Perkins: www.perkinsproducts.org – braillewriters

National Catalog Companies

- Enablemart: www.enablemart.com
- Independent Living Aids: www.independentliving.com
- LS&S: www.lssproducts.com
- Maxi Aids: www.maxiaids.com
- Magnifying Aids: www.magnifyingaids.com

State / Local Distributors

- Audio Optical Systems of Texas:
www.kurzweilaustin.com
- Christal Vision: www.christal-vision.com
- HIMS: www.hims-inc.com
- Lighthouse of Houston: www.houstonlighthouse.org
- Magnifiers & More / Northwest Hills Eye Care:
<http://nwhillseyecare.pecaa-sites.com/>

Built-in Computer Tech

- For Mac: <https://www.apple.com/accessibility/mac/>: Features:
 - VoiceOver
 - Zoom
 - Dictation
 - Cursor size
- For Windows: <https://support.microsoft.com/en-us/help/27928/windows-10-make-windows-easier-to-see>: Features:
 - Magnifier
 - Narrator

For Smart Phones

- iOS (Apple):
 - Siri
 - VoiceOver
 - Magnifier
 - Zoom
 - Audio descriptions
- For Android:
 - TalkBack
 - Magnification
 - Voice access
 - Switch access
 - BrailleBack

Built-In Accessibility Contacts

- For Mac: <https://www.apple.com/accessibility/mac/>
- For iOS:
 - 877-204-3930
 - www.apple.com/accessibility/
- For Windows:
 - Microsoft Accessibility Technical Support
 - 800-936-5900
 - <https://support.microsoft.com/en-us/accessibility/disability-answer-desk>
- For Android:
<https://support.google.com/accessibility/android/answer/6006564?hl=en>

Texas Agencies / Organizations

- Independent Living Centers: <https://www.ilru.org/projects/cil-net/cil-center-and-association-directory-results/TX>
- TWC Vocational Rehabilitation: 800-628-5115, <https://twc.texas.gov/jobseekers/vocational-rehabilitation-adults>
- Criss Cole: 512-377-0300, <https://twc.texas.gov/jobseekers/criss-cole-rehabilitation-center>
- TWC Offices for Older Blind Individuals: <https://twc.texas.gov/partners/independent-living-services-older-individuals-who-are-blind>

More Texas Agencies / Organizations

- Texas School for the Blind & Visually Impaired: 512-454-8631, www.tsbvi.edu
- Blind Children's Discovery Program: 877-787-8999, <https://hhs.texas.gov/services/disability/blind-visually-impaired/blind-childrens-vocational-discovery-development-program>
- Texas Education Agency (TEA) Education Service Centers: <https://tea.texas.gov/about-tea/other-services/education-service-centers/education-service-centers-map>
- Texas Technology Access Program: 800-828-7839, <https://techaccess.edb.utexas.edu/>

More Texas Agencies / Organizations

- Lighthouses for the Blind: Austin, , Dallas, East Texas (Tyler), Fort Worth, Houston, San Antonio, and South Texas (Corpus Christi)
- Sight into Sound: 713-622-2767, www.sightintosound.org
- OWL Radio: www.owlradio.org/owl-radio
- ibug: www.ibugtoday.com/
- Advocacy organizations:
 - American Council for the Blind of Texas: www.acbtexas.org/
 - National Federation of the Blind of Texas: www.nfbtx.org/
 - Newsline program: www.nfbtx.org/newsline.php

More Texas Agencies / Organizations

- Computers for the Blind: 214-340-6328,
www.computersfortheblind.org
- Texas Health and Human Services STAP program:
<https://hhs.texas.gov/laws-regulations/forms/3000-3999/form-3906-application-specialized-telecommunications-assistance-program-stap>
- Currency Reader Program (national):
www.moneyfactory.gov/uscurrencyreaderpgm.html

National Organizations

- Hadley Institute for the Blind: www.Hadley.edu, 800-323-4238
- American Foundation for the Blind: www.afb.org, 212-502-7600
- American Council of the Blind: www.acb.org, 800-424-8666
- National Federation of the Blind: www.nfb.org, 410-659-9314

NLS Reference Guides

- Accessible Mobile Reading Apps
- Assistive Technology Products for Information Access
- Braille Displays and Notetakers
- Braille Embossers
- GPS and Wayfinding Apps
- Magnifying Devices
- www.loc.gov/nls/resources/blindness-and-vision-impairment/devices-aids/

DIRC Materials

- AT & computer training
- Apple and Android resources
- Computer and Assistive Technology Funding Guide
- Mobile phone fact sheet
- CCTV (video magnifier) fact sheet
- Magnification fact sheet
- Speech Systems for the computer fact sheet
- City lists for Austin, Beaumont, Corpus Christi, Dallas, El Paso, Fort Worth, Houston, San Antonio, and Tyler

New Technology

- Virtual Assistance Apps:
 - Aira: <https://aira.io/>
 - Be My Eyes: www.bemyeyes.com/
 - Seeing AI: www.microsoft.com/en-us/ai/seeing-ai
- Glasses:
 - Envision: www.letsenvision.com/
 - E-sight: <https://esighteyewear.com/>
- Screen reader app:
 - KNFB Reader: www.knfbreader.com/

Contact Info

- Dina Abramson
- Disability Information & Referral Coordinator
- Texas Talking Book Program
- Texas State Library & Archives Commission
- 800-252-9605 (toll free in Texas)
- 512-463-2831
- dabramsn@tsl.Texas.gov
- www.TexasTalkingBooks.org





Meagan Daniels

*Reader Consultant/
Assistive Technology Specialist*
Texas Talking Book Program



JAWS

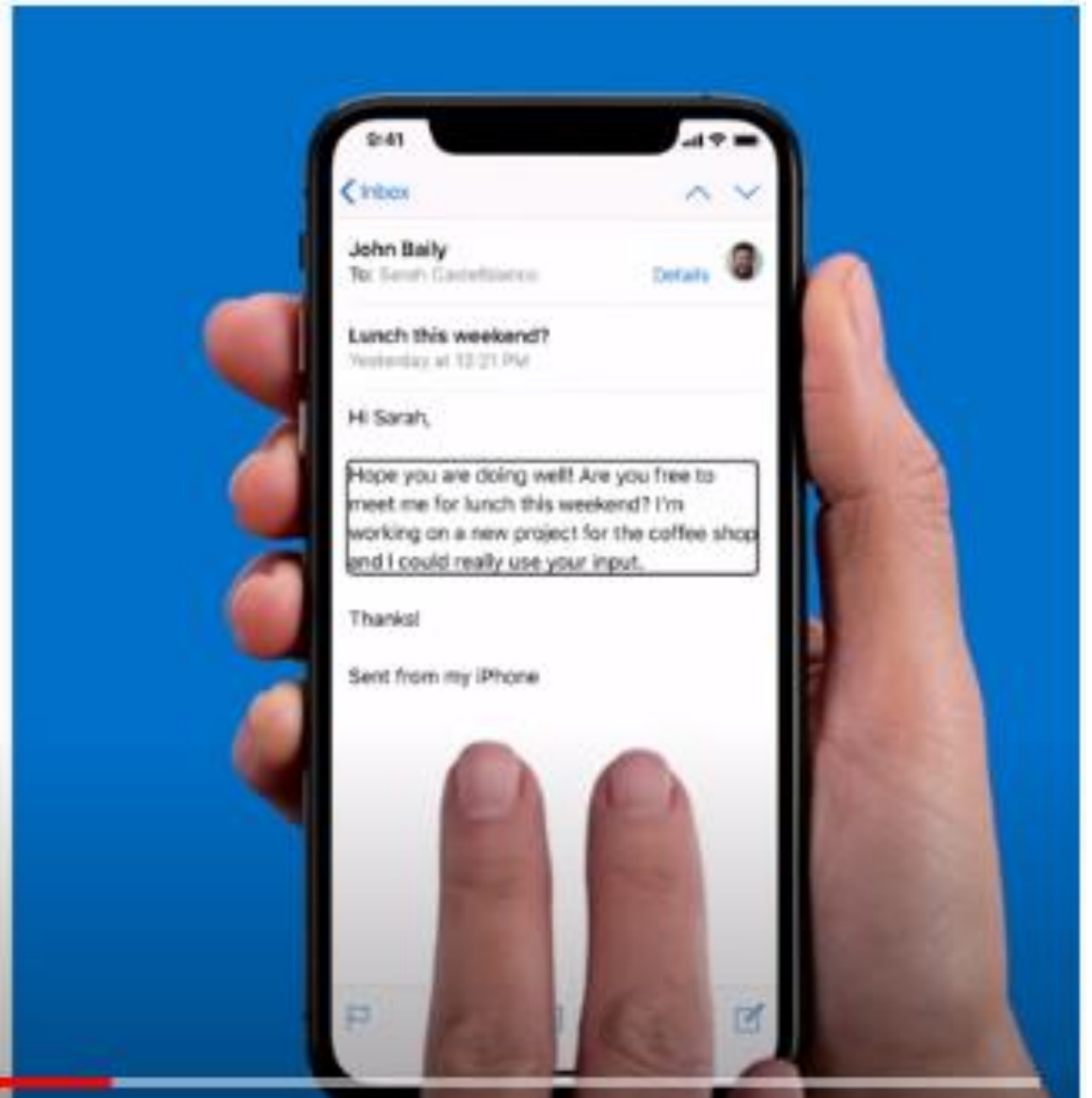
Job Access With Speech

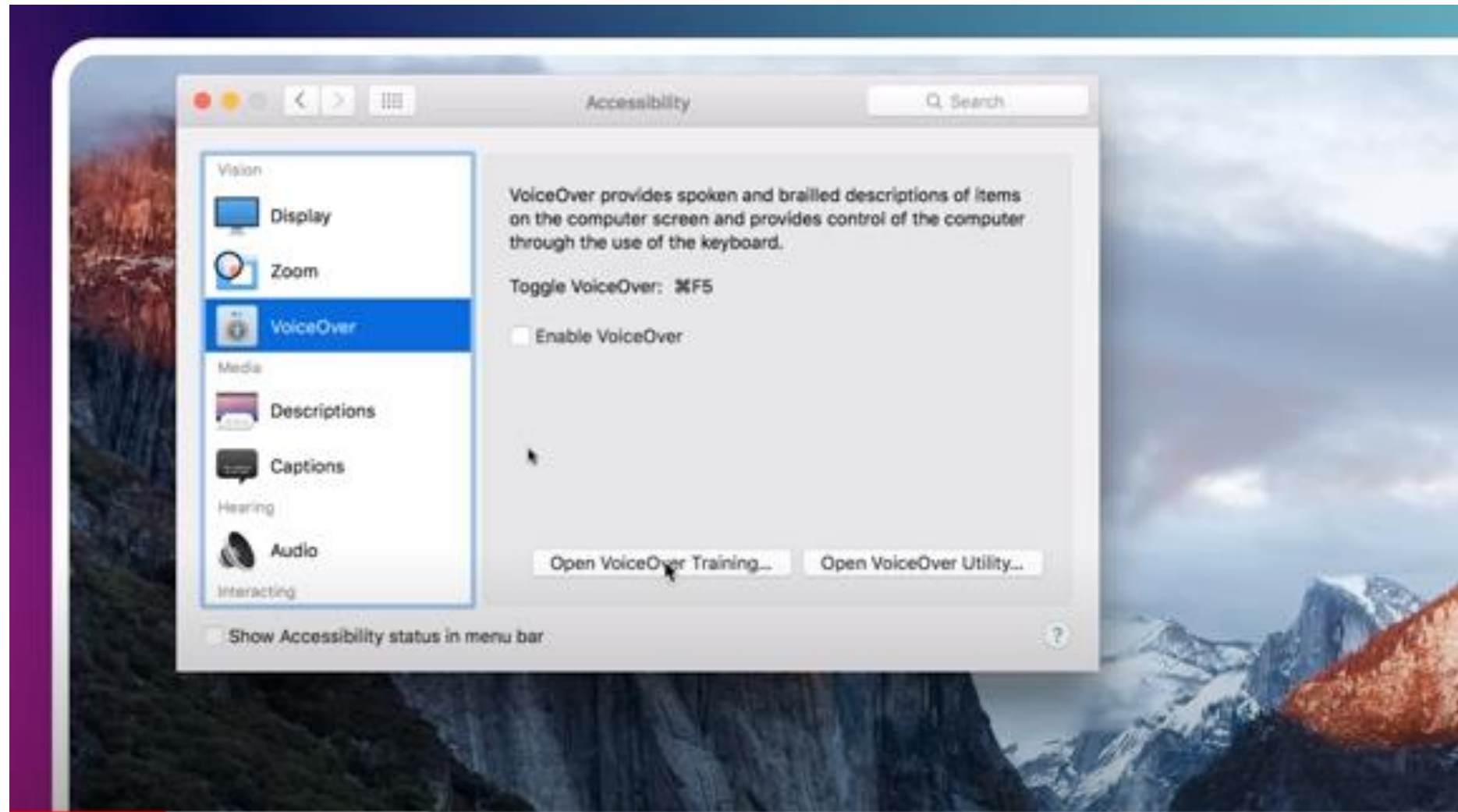
screen reader software for Windows by Freedom Scientific

[This Photo](#) by Unknown Author is licensed under [CC BY-SA](#)

Pause VoiceOver

Tap once with
two fingers to
have VoiceOver
stop reading

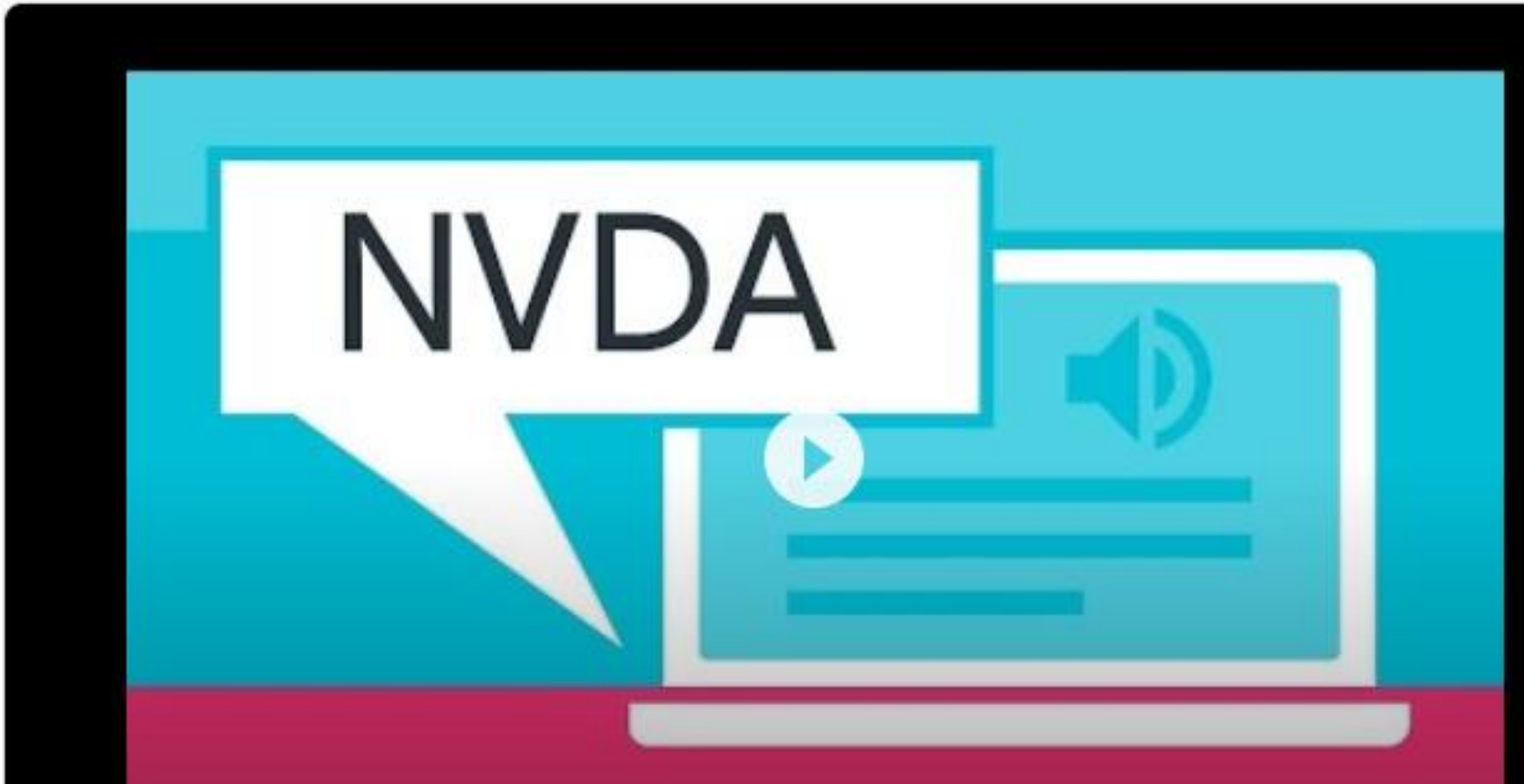




Source:



Source:



Non Visual Desktop Access, a free screen reader for Windows

Source:

2014 Samsung Smart TV Accessibility Features



Voice Guide and Voice Interaction

Natural language recognition



Voice Guide supports key TV operations, such as volume, channel information and program guide

Say "Anything interesting on tonight?"



TV provides Voice Guide for recommended programs



Enlarge and High Contrast



Enlarge

Enlarge focused thumbnail and text by 120% ~ 200%
High Contrast UI

Change background colour to black and change text colour to white or yellow
Reduced transparency popup menus



Accessibility Shortcut



Open the Accessibility Shortcut Menu by pressing the <mute> button for a longer time



Voice Guide support is provided for the Accessibility Shortcut Menu



Source: